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EXHIBIT R-2, FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 4 PROGRAM ELEMENT: 0603800N
PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM

(U) COST (Dollars in thousands)

PROJECT NUMBER	FY 1998 <u>BUDGET</u>	FY 1999 <u>ESTIMATE</u>	FY 2000 <u>ESTIMATE</u>	FY 2001 <u>ESTIMATE</u>	FY 2002 <u>ESTIMATE</u>	FY 2003 <u>ESTIMATE</u>	FY 2004 <u>ESTIMATE</u>	FY 2005 <u>ESTIMATE</u>	TO <u>COMPLETE</u>	TOTAL <u>PROGRAM</u>
D2209										
JSF	448,236	468,509	241,238	25,762	0	0	0	0	0	1,635,252

Quantity of RDT&E Articles 4

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Joint Strike Fighter (JSF) Program will develop and field an affordable, highly common family of next generation strike fighter aircraft for the USN, USMC, USAF and allies. Current program emphasis is on facilitating the evolution of fully validated and affordable joint operational requirements, and demonstrating cost leveraging technologies and concepts to lower risk prior to entering Engineering and Manufacturing Demonstration (E&MD) in FY 2001. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding for the program. The United Kingdom is a collaborative partner in this phase of the program and several other countries also participate.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under DEMONSTRATION & VALIDATION because it integrates hardware for test related to specific ship or aircraft applications.

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 4 PROGRAM ELEMENT: 0603800N PROJECT NUMBER: D2209
PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM PROJECT TITLE: JSF

(U) COST (Dollars in thousands)

PROJECT NUMBER	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO	TOTAL
<u>TITLE</u>	<u>BUDGET</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>COMPLETE</u>	<u>PROGRAM</u>
D2209										
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(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under DEMONSTRATION & VALIDATION because it integrates hardware for test related to specific ship or aircraft applications.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 1998 ACCOMPLISHMENTS: (Breakout reflects Navy, Air Force, DARPA, UK, Multi-Lateral and Canadian funding)

- (U) (\$717,026) Continued Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including company unique technology demonstrations and concept refinement for a tri-service family of aircraft.
- (U) (\$ 34,956) Continued the Alternate Engine Program.
- (U) (\$179,584) Continued technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility, propulsion, and mission systems. Continued systems engineering support for the Concept Demonstration Phase in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control and carrier suitability.
- (U) (\$ 23,325) Continued technology maturation demonstrations and assessments in the area of prognostics and health management and supportability and training.
- (U) (\$ 20,642) Continued modeling and simulation activities to support strike warfare mission area analysis and requirements analysis efforts including Cost & Operational Performance Trades (COPT) to facilitate the Services' joint requirements definition.

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

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PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM PROJECT TITLE: JSF

- (U) (\$ 15,005) Continued mission support, including program office functions.
 - (U) (\$990,538) Total
2. (U) FY 1999 PLAN: (Breakout reflects Navy, Air Force, UK, Multi-Lateral, Canadian and Italian funding)
- (U) (\$670,284) Continue Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including company unique technology demonstrations, complete final design and continue build of Concept Demonstrator Aircraft (CDA) and continue concept refinement for a tri-service family of aircraft.
 - (U) (\$ 25,790) Continue the Alternate Engine Program.
 - (U) (\$195,011) Continue technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility, propulsion and mission systems. Complete approximately half of the demonstrations. Continue systems engineering support for the Concept Demonstration Phase in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control and carrier suitability.
 - (U) (\$ 28,009) Continue technology maturation demonstrations and assessments in the area of prognostics and health management and supportability and training.
 - (U) (\$ 13,328) Continue modeling and simulation activities to support strike warfare mission area analysis and requirements analysis efforts including COPT to facilitate the Services' joint requirements definition. Complete requirements analysis in support of final requirements document. Continue modeling and simulation support testing, training, and refinement of concept of operations for the weapons system (simulation based acquisition).
 - (U) (\$ 15,174) Continue mission support, including program office functions.
 - (U) (\$ 7,980) Anticipated General Reductions.
 - (U) (\$ 11,003) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638. (USN only)
 - (U) (\$ 11,219) Identified as a source for SBIR (USAF only).
 - (U) (\$977,798) Total
3. (U) FY 2000 PLAN: (Breakout reflects Navy, Air Force, UK, Multi-Lateral and Canadian funding)
- (U) (\$357,791) Continue Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including ground and flight demonstrations and concept refinement for a tri-service family of aircraft. Request proposals from contractors for their designs and E&MD programs.

R-1 Item No. 74

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, Page 3 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 4 PROGRAM ELEMENT: 0603800N PROJECT NUMBER: D2209
PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM PROJECT TITLE: JSF

- (U) (\$ 33,000) Continue the Alternate Engine Program.
- (U) (\$ 76,000) Complete the remaining technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility, propulsion and mission systems. Continue systems engineering support for the Concept Demonstration Phase in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control and carrier suitability.
- (U) (\$ 22,438) Continue technology maturation demonstrations and assessments in the area of prognostics and health management and supportability and training.
- (U) (\$ 10,000) Continue modeling and simulation activities to support strike warfare mission area analysis and requirements analysis efforts including COPT to facilitate the Services' joint requirements definition. Support analysis as required for final Joint Operational Requirements Document (JORD) coordination and signature. Continue modeling and simulation support testing, training, and refinement of concept of operations for the weapons system (simulation based acquisition).
- (U) (\$ 11,183) Continue mission support, including program office functions.
- (U) (\$510,412) Total

(U) B. PROGRAM CHANGE SUMMARY: (Dollars in thousands)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	\$449,674	\$463,402	\$244,983
(U) Appropriated Value:	\$463,855	\$470,902	
(U) Adjustments from FY 1999 President's Budget:	-\$1,438	+\$5,107	-\$3,745
(U) FY 2000 President's Budget Submission:	\$448,236	\$468,509	\$241,238

(U) CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 net decrease of -\$1,438 thousand reflects SBIR reduction of -\$5,231 thousand, Federal Technology Transfer reduction of -\$12 thousand and below threshold reprogramming of +\$3,805. FY 1999 net increase of +\$5,107 thousand reflects inflation adjustment of -\$1,083 thousand, Congressional undistributed reductions of -\$1,310 thousand and Alternate Engine Development increase of +\$7,500 thousand. FY 2000 decrease of -\$3,745 reflects Inflation reduction of -\$3,714 thousand and miscellaneous rate adjustments of -\$31 thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

R-1 Item No. 74

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, Page 4 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 4 PROGRAM ELEMENT: 0603800N PROJECT NUMBER: D2209
 PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM PROJECT TITLE: JSF

(U) C. OTHER PROGRAM FUNDING SUMMARY: (Dollars in thousands) This is a joint program with no executive service. The United Kingdom is a collaborative partner in this phase of the program and several other countries also participate.

Appn	FY 1998 BUDGET	FY 1999 ESTIMATE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
(U) RDT&E										
0603800F	444,277	454,789	235,374	22,558	0	0	0	0	0	1,573,681
(U) RDT&E										
0603800E	20,925	0	0	0	0	0	0	0	0	118,006
(U) UNITED										
KINGDOM	55,000	34,000	26,000	0	0	0	0	0	0	200,000
(U) MULTI-										
LATERAL	17,800	7,500	5,100	1,700	0	0	0	0	0	32,100
(U) CANADA										
	4,300	3,000	2,700	600	0	0	0	0	0	10,600
(U) ITALY										
	0	10,000	0	0	0	0	0	0	0	10,000

(U) RELATED RDT&E:

Milestone II for E&MD of the Joint Strike Fighter (JSF) is planned in FY 2001.

	FY 1998 BUDGET	FY 1999 ESTIMATE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM *
(U) RDT&E										
0604800F	0	0	0	536,586	1,332,890	1,814,352	1,871,288	1,649,464	TBD**	TBD**
(U) RDT&E										
0604800N	0	0	0	535,757	1,338,397	1,823,084	1,881,144	1,658,884	TBD**	TBD**

*Excludes anticipated foreign funding which is TBD.

** TBD pending completion of the December 1998 Selected Acquisition Report (SAR).

(U) RELATED PROCUREMENT FUNDING:

Advanced Procurement for the Joint Strike Fighter (JSF) is planned in FY 2004.

	FY 1998 BUDGET	FY 1999 ESTIMATE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
(U) USAF										
0207142F	0	0	0	0	0	0	18,000	599,983	TBD	TBD
(U) APN-1										
0204800N	0	0	0	0	0	0	0	58,532	TBD	TBD

R-1 Item No. 74

Exhibit R-2a, RDT&E Project Justification
 (Exhibit R-2a, Page 5 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

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PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JSF) PROGRAM PROJECT TITLE: JSF

(U) D. ACQUISITION STRATEGY:

Program activities center around three distinct objectives that provide a sound foundation for the start of Engineering and Manufacturing Development (E&MD) in 2001:

- (1) facilitating the Services' development of fully validated, affordable operational requirements;
- (2) lowering risk by investing in and demonstrating key leveraging technologies that lower the cost of development, production and ownership; and
- (3) demonstrating operational concepts.

Early warfighter and technologist interaction is an essential aspect of the requirements definition process, and key to achieving JSF affordability goals. To an unprecedented degree the JSF Program is using cost-performance trades early, as an integral part of the weapon system development process. The Services are defining requirements through an iterative process, balancing weapon system capability against life cycle cost at every stage. Each iteration of requirements is provided to industry. They evolve their designs and provide cost data back to the warfighters. The warfighters evaluate trades and make decisions for the next iteration. This process produced the Services' first Joint Initial Requirements Document (JIRD I) in 1995 and the second and third iterations in 1997 and 1998, respectively. The Services continue to refine their requirements through this process, which will culminate in the Joint Operational Requirements Document (JORD) in FY 2000 to support the Milestone II decision.

A sizable technology maturation effort is underway to reduce risk and life cycle cost (LCC) through technology maturation and demonstration. The primary emphasis is on technologies which have been identified as high payoff contributors to affordability, supportability, survivability and lethality. Numerous demonstrations have been accomplished and others are in process to validate performance and life cycle cost impact to component, subsystem, and the total system.

A multi-year \$2.2 billion JSF Concept Demonstration effort commenced in November 1996 with competitive contract awards to Boeing and Lockheed Martin for Concept Demonstration Programs. These competing contractors will build and fly concept demonstrator aircraft, conduct concept unique ground demonstrators, and continue refinement of their ultimate delivered weapon system concepts. Specifically, Boeing and Lockheed Martin will demonstrate commonality and modularity, STOVL hover and transition, and low speed handling qualities of their respective weapon system concepts. Pratt and Whitney is providing propulsion hardware and engineering support for both Boeing's and Lockheed Martin's on-going JSF Concept Demonstration efforts. The JSF Concept Demonstration approach has several benefits:

- (1) maintains the competitive environment prior to E&MD and provides for two different STOVL approaches and two different aerodynamic configurations
- (2) demonstrates the viability of a multi-service family of variants with high commonality and modularity between CTOL, CV, and STOVL variants
- (3) provides affordable and low risk technology transition to the JSF E&MD phase.

The JSF Alternate Engine Program, with General Electric, continues development of an alternate engine for production.

Downselect to a single prime weapon system contractor for E&MD and Milestone II are planned in FY 2001. JSF production is planned to begin in FY 2005.

UNCLASSIFIED

UNCLASSIFIED

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(U) E. SCHEDULE PROFILE:

Dec 94 Commenced Concept Development Phase
Mar 96 Released RFP for Concept Demonstration Efforts
May 96 Designated a joint, DOD, Acquisition Category ID Program by USD(A&T)
Nov 96 Competitively Awarded Concept Demonstration Contracts to Boeing and Lockheed Martin
Dec 99 Complete Joint Operational Requirements Document (JORD)
Mar 01 Milestone II for JSF E&MD

R-1 Item No. 74

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, Page 7 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

BUDGET ACTIVITY: 4	PROGRAM ELEMENT: 0603800N	USN	PROJECT NUMBER: D2209
BUDGET ACTIVITY: 4	PROGRAM ELEMENT: 0603800F	USAF	PROJECT NUMBER: 2025
BUDGET ACTIVITY: 3	PROGRAM ELEMENT: 0603800E	DARPA	PROJECT NUMBER: JA-01
BUDGET ACTIVITY: NA	PROGRAM ELEMENT: N/A	UNITED KINGDOM	PROJECT NUMBER: UK
BUDGET ACTIVITY: NA	PROGRAM ELEMENT: N/A	MULTI-LATERAL	PROJECT NUMBER: ML
BUDGET ACTIVITY: NA	PROGRAM ELEMENT: N/A	CANADA	PROJECT NUMBER: CAN
BUDGET ACTIVITY: NA	PROGRAM ELEMENT: N/A	ITALY	PROJECT NUMBER: ITALY
	PROGRAM ELEMENT TITLE: JOINT STRIKE FIGHTER (JS	PROJECT TITLE: JSF	

B. (U) BUDGET ACQUISITION HISTORY AND PLANNING (\$ in thousands) No budget in FY 1993 and Prior.

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total FY 1998 & Prior</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>PROJECT DEVELOPMENT</u>										
<u>Strike Warfare Concept Studies (Total Prior to FY 2000)</u>										
	Various	Miscellaneous	11,467						11,467	
SUBTOTAL			11,467						11,467	
<u>Technology Maturation Concept Exploration Phase (Total Prior to FY 2000)</u>										
	Various	Fld. Activ.	3,432						3,432	
<u>Strike Warfare Systems Design Development (Total Prior to FY 2000)</u>										
	C/CPFF	Boeing	32,770						32,770	
		Seattle WA								
	C/CPFF	McAir	23,708						23,708	
		St. Louis MO								
	C/CPFF	Northrop	21,358						21,358	
		Pico Rivera CA								
	C/CPFF	Lockheed	28,311						28,311	
		Fort Worth TX								
	Various	Miscellaneous	1,121						1,121	
	Various	Fld. Activ.	8,322						8,322	
SUBTOTAL			115,590						115,590	
<u>ASTOVL (Total Prior to FY 2000)</u>										
	SS/CPFF	Lockheed	16,416						16,416	
	SS/CPFF	Boeing	11,200						11,200	
	Various	Miscellaneous	15,539						15,539	
SUBTOTAL			43,155						43,155	
<u>Core Team Support (Total Prior to FY 2000)</u>										
	Various	Fld. Activ.	2,522						2,522	

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total FY 1998 & Prior</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>Weapon System Concept Demonstrations (including flying demonstrators and supporting propulsion efforts)</u>										
	C/CPFF	Boeing *	267,735	223,734	Oct 98	142,491	Oct 99	10,892	644,852	732,853
	C/CPFF	Lockheed *	321,800	231,950	Oct 98	139,100	Oct 99	9,000	701,850	795,631
	SS/CPAF	Pratt & Whitney *	502,166	188,808	Nov 98	59,974	Nov 99	200	751,148	865,615
		West Palm Beach FL								

*includes government managed equipment

Note: The Total Costs of the Boeing and Lockheed contracts reflect the budgeted basic Concept Development Program (CDP) efforts only. The Target Values of these contracts reflect funding requirements for CDP and Technology Maturation efforts for Prognostics and Health Management/Supportability and Training and Mission Systems. Pratt & Whitney Total Cost excludes award fees reflected below. The Pratt & Whitney Target Value includes award fees, and reflects CDP efforts and Technology Maturation efforts in Propulsion and Prognostics and Health Management.

Award Fees

C/CPFF	Pratt & Whitney	<u>35,052</u>	<u>25,792</u>	Various	<u>16,226</u>	Various	<u>0</u>	<u>77,070</u>
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Note: FY 1997 percentage of award fee paid was 91%; FY 1998 percentage of award fee paid was 84%.

SUBTOTAL	1,126,753	670,284	357,791	20,092	2,174,920
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Alternate Engine Program

SS/CPFF	GE	7,000					7,000	
	Cincinnati OH							
SS/CPFF	GE	<u>59,956</u>	<u>25,790</u>	Nov 98	<u>33,000</u>	Oct 99	<u>118,746</u>	121,746
SUBTOTAL		66,956	25,790		33,000		125,746	

Note: The Target Value includes Propulsion Technology Maturation efforts.

Technology Maturation

Airframe

SS/CPFF	McAir	19,240					19,240
Various	Miscellaneous	1,985	500	Various	500	Various	2,985
Various	Fld. Activ.	<u>4,236</u>	<u>728</u>	Nov 98	<u>1,000</u>	Nov 99	<u>5,964</u>
SUBTOTAL		25,461	1,228		1,500		28,189

Flight Systems

C/CPFF	Lockheed	41,515	7,731	Nov 98	1,502	Nov 99	50,748
C/CPFF	McAir	46,901	13,300	Nov 98	4,620	Nov 99	64,821
TBD	TBD		8,000	Mar 99			8,000
Various	Miscellaneous	9,090	600	Nov 98	311	Nov 99	10,001
Various	Fld. Activ.	<u>13,491</u>	<u>7,356</u>	Nov 98	<u>3,289</u>	Nov 99	<u>24,136</u>
SUBTOTAL		110,997	36,987		9,722		157,706

R-1 Item No. 74

Exhibit R-3, RDT&E Project Cost Analysis
(Exhibit R-3, Page 9 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total FY 1998 & Prior</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>Manufacturing and Producibility</u>										
	C/CPFF	Hughes	5,065						5,065	
		Los Angeles CA								
	C/CPFF	Lockheed	7,500	2,890	Nov 98	170	Nov 99		10,560	
		General Res.								
	C/CPFF	Corp.	1,945						1,945	
		Huntsville AL								
	C/CPFF	Scaled Composites	2,000						2,000	
	C/CPFF	Lockheed	700						700	
	Various	Miscellaneous	1,343	270	Various				1,613	
	Various	Fld. Activ.	<u>3,286</u>	<u>1,055</u>	Nov 98	<u>1,530</u>	Nov 99		<u>5,871</u>	
SUBTOTAL			21,839	4,215		1,700			27,754	
<u>Propulsion</u>										
	C/CPFF	Pratt/Whitney	5,448						5,448	
	SS/CPFF	GE	5,681						5,681	
	SS/CPFF	Pratt/Whitney	30,000						30,000	
	SS/CPFF	GE	3,000						3,000	
	SS/CPFF	Pratt/Whitney	22,988	3,789	Jan 99				26,777	
	SS/CPFF	Pratt & Whitney	3,640						3,640	
	SS/TBD	Pratt & Whitney	7,000	1,200	Dec 98				8,200	
	NASA Contract		700						700	
	Various	Miscellaneous	12,895						12,895	
	Various	Fld. Activ.	<u>24,484</u>	<u>18,048</u>	Various	<u>3,600</u>	Various		<u>46,132</u>	
SUBTOTAL			115,836	23,037		3,600			142,473	
<u>Mission Systems</u>										
	C/CPFF	TI	2,464						2,464	
		Plano TX								
	SS/CPFF	Lockheed	6,856						6,856	
	SS/CPFF	McAir	6,524						6,524	
	C/CPFF	Raytheon	27,274	22,582	Nov 98	3,512	Nov 99		53,368	
	C/CPFF	Northrop/Grumman	25,946	19,272	Nov 98	1,697	Nov 99		46,915	
	C/CPFF	Boeing	15,174	16,700	Nov 98	990	Nov 99		32,864	
	C/CPFF	Lockheed	14,983	16,700	Nov 98	1,205	Nov 99		32,888	
	C/CPFF	Boeing	1,100	2,500	Nov 98	2,747	Nov 99	4,377	10,724	
	C/CPFF	Lockheed	1,100	2,500	Nov 98	2,747	Nov 99	4,216	10,563	
	C/CPFF	Hughes	3,681						3,681	
	Classified		2,000	1,000	Nov 98				3,000	
	Various	Miscellaneous	20,097	3,114	Various	4,644	Various		27,855	
	Various	Fld. Activ.	<u>22,283</u>	<u>5,956</u>	Nov 98	<u>6,498</u>	Nov 99	<u>255</u>	<u>34,992</u>	
SUBTOTAL			149,482	90,324		24,040		8,848	272,694	

R-1 Item No. 74

Exhibit R-3, RDT&E Project Cost Analysis
(Exhibit R-3, Page 10 of 12)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total FY 1998 & Prior</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>Systems Engineering Support</u>										
	Various	Miscellaneous	11,993	5,667	Various	5,658	Various	657	23,975	
	Various	Fld. Activ.	<u>71,648</u>	<u>32,632</u>	Nov 98	<u>28,860</u>	Nov 99	<u>3,699</u>	<u>136,839</u>	
SUBTOTAL			83,641	38,299		34,518		4,356	160,814	
<u>Prognostics and Health Management/Supportability and Training</u>										
	C/CPFF	Boeing	4,450	3,706	Nov 98	2,868	Nov 99		11,024	
	C/CPFF	Lockheed	5,050	5,350	Nov 98	2,647	Nov 99		13,047	
	C/CPFF	Pratt & Whitney	10,100						10,100	
	C/CPFF	General Electric		1,500	Jan 99				1,500	
	C/CPFF	Classified								
	C/CPFF	Project 3	7,826	750	Jan 99				8,576	
	C/CPFF	Project 4	4,799	750	Jan 99				5,549	
	C/CPFF	Boeing	2,375	1,012	Nov 98				3,387	
	C/CPFF	Lockheed	2,375	1,625	Nov 98				4,000	
	C/CPFF	Boeing		2,465	Jan 99	4,265	Nov 99	1,000	7,730	
	C/CPFF	Lockheed		2,465	Jan 99	4,265	Nov 99	1,000	7,730	
	TBD	New Contract			Feb 99		Nov 99	7,000	7,000	
	Various	Miscellaneous	3,815	3,394	Various	2,500	Various	500	10,209	
		Fld. Activ.	<u>8,202</u>	<u>4,990</u>	Nov 98	<u>5,893</u>	Nov 99	<u>2,444</u>	<u>21,529</u>	
SUBTOTAL			48,992	28,007		22,438		11,944	111,381	
<u>Modeling, Simulation, Analysis, Threat, COPT and Core Support</u>										
	Various	Miscellaneous	38,061	9,281	Various	7,583	Various	2,515	57,440	
	Various	Fld. Activ.	<u>19,008</u>	<u>3,001</u>	Nov 98	<u>2,017</u>	Nov 99	<u>685</u>	<u>24,711</u>	
SUBTOTAL			57,069	12,282		9,600		3,200	82,151	
<u>Mission Support</u>										
	Grant	Institute for Defense Anal	2,500						2,500	
	Various	Fld. Activ.	<u>19,289</u>	<u>7,332</u>	Various	<u>3,438</u>	Various	<u>1,880</u>	<u>31,939</u>	
SUBTOTAL			21,789	7,332		3,438		1,880	34,439	
Subtotal Project Development			2,004,981	937,768		501,347		50,320	3,494,416	
<u>SUPPORT (CS)</u>										
	SS/CPFF	ANSER Arlington VA	19,541	4,720	Jan 99	4,720	Jan 00		28,981	
	Various	Miscellaneous	<u>16,287</u>	<u>5,091</u>	Various	<u>4,345</u>		<u>300</u>	<u>26,023</u>	
Subtotal Support			35,828	9,811		9,065		300	55,004	
Subtotal Anticipated General Reductions				7,980					7,980	

R-1 Item No. 74

Exhibit R-3, RDT&E Project Cost Analysis
(Exhibit R-3, Page 11 of 12)

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EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total FY 1998 & Prior</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>TEST AND EVALUATION:</u> (included above)										
<u>MANAGEMENT:</u> N/A										
<u>SBIR Assessment: (USN ONLY)</u>				11,003					11,003	
<u>Identified as Source for SBIR (USAF ONLY)</u>				11,219					11,219	
Total Cost			2,040,809	977,798		510,412		50,620	3,579,639	
Funding Resources										
0603800N			899,743	468,509		241,238		25,762	1,635,252	
0603800F			860,960	454,789		235,374		22,558	1,573,681	
0603800E			118,006						118,006	
United Kingdom			140,000	34,000		26,000			200,000	
Multi-Lateral			17,800	7,500		5,100		1,700	32,100	
Canada			4,300	3,000		2,700		600	10,600	
Italy			<u>0</u>	<u>10,000</u>		<u>0</u>		<u>0</u>	<u>10,000</u>	
Total			2,040,809	977,798		510,412		50,620	3,579,639	

R-1 Item No. 74

Exhibit R-3, RDT&E Project Cost Analysis
(Exhibit R-3, Page 12 of 12)

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